



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-8133; Directorate Identifier 2015-NM-101-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. This proposed AD was prompted by reports of heavy corrosion and chrome damage on the forward and aft trunnion pin assemblies of the right and left main landing gears (MLGs). This proposed AD would require repetitive lubrication of the forward and aft trunnion pin assemblies of the right and left MLGs; repetitive inspections of these assemblies for corrosion and chrome damage, and related investigative and corrective actions if necessary; and the installation of new or modified trunnion pin assembly components, which would terminate the repetitive lubrication and repetitive inspections. We are proposing this AD to detect and correct heavy corrosion and chrome damage on the forward and aft trunnion pin assemblies of the right and left MLGs, which could result in cracking of these assemblies and collapse of the MLGs.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8133.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8133; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Alan Pohl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6450; fax: 425-917-6590; email: alan.pohl@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-8133; Directorate Identifier 2015-NM-101-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received reports of heavy corrosion and chrome damage of the forward and aft trunnion pin assemblies of the right and left main MLGs on Boeing Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. Investigation revealed that the lubrication between the forward and aft trunnion pin assemblies and the outer cylinder assembly bushings and the lubrication of the aft trunnion bearing ball was not sufficient to prevent wear and corrosion. It was also determined that the clearances between the forward and aft trunnion pin cross bolt bushings and the cross bolts could affect the rate of wear and corrosion of the MLG trunnion pin assemblies. Corrosion and chrome damage of the forward and aft trunnion pin assemblies of the right and left main MLGs, if not corrected, could result in cracking of these assemblies and collapse of the MLGs.

Related Service Information under 1 CFR part 51

We reviewed Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015. The service information describes procedures for lubricating the forward and aft trunnion pin assemblies on the left and right MLGs, inspecting the forward and aft trunnion pin assemblies for corrosion or damage, and performing corrective actions. In addition, the service information describes procedures for installing a new forward trunnion pin housing assembly, seal, and retainer configuration. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the Service Information.” For information on the procedures and compliance times, see this service information at <http://regulations.gov> by searching for and locating Docket No. FAA-2015-8133.

The phrase “related investigative actions” is used in this proposed AD. “Related investigative actions” are follow-on actions that (1) are related to the primary actions, and (2) further investigate the nature of any condition found. Related investigative actions in an AD could include, for example, inspections.

The phrase “corrective actions” is used in this proposed AD. “Corrective actions” are actions that correct or address any condition found. Corrective actions in an AD could

include, for example, repairs.

Costs of Compliance

We estimate that this proposed AD affects 1,023 airplanes of U.S. registry

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Lubrication	2 work-hours X \$85 per hour = \$170, per lubrication cycle	\$0	\$170	\$173,190, per lubrication cycle (1,023 airplanes)
Inspection (Groups 1 and 2, Configuration 1 airplanes)	51 work-hours X \$85 per hour = \$4,335, per inspection cycle	\$0	\$4,335	\$4,282,980, per inspection cycle (988 airplanes)
Inspection (Group 3 airplanes)	93 work-hours X \$85 per hour = \$7,905, per inspection cycle	\$0	\$7,905	\$276,675, per inspection cycle (35 airplanes)
Replacement/overhaul (Groups 1 and 2)	84 work-hours X \$85 per hour = \$7,140	\$0	\$7,140	\$7,054,320 (988 airplanes)
Replacement/overhaul (Group 3 airplanes)	86 work-hours X \$85 per hour = \$7,310	\$0	\$7,310	\$255,850 (35 airplanes)

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2015-8133; Directorate Identifier 2015-NM-101-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to certain The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Unsafe Condition

This AD was prompted by reports of heavy corrosion and chrome damage of the forward and aft trunnion pin assemblies of the right and left main landing gears (MLG). We are issuing this AD to detect and correct heavy corrosion and chrome damage of the forward and aft trunnion pin assemblies of the right and left MLGs, which could result in cracking of these assemblies and collapse of the MLGs.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Lubrication of MLG Trunnion Pin Assemblies

For airplanes in Groups 1 and 2, Configuration 1, and airplanes in Group 3, as identified in Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015: Except as required by paragraph (k) of this AD, at the applicable time specified in Table 1 or Table 2 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015, lubricate the forward and aft trunnion pin assemblies of the left and right MLGs, in accordance with Work Package 1 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015. Repeat the lubrication thereafter at intervals not to exceed those specified in paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015. Accomplishment of paragraph (i) of this AD terminates the repetitive lubrication required by this paragraph.

(h) Repetitive Inspections, Corrective Actions, and Lubrication

For airplanes in Groups 1 and 2, Configuration 1, and airplanes in Group 3, as identified in Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015: Except as required by paragraph (k) of this AD, at the applicable time specified in Table 1 or Table 2 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015, do a general visual inspection of the left and right MLGs at the forward and aft trunnion pin locations and the visible surfaces of the forward and aft trunnion pin assemblies for signs of corrosion or chrome plating damage and lubricate the forward and aft trunnion pin assemblies, in accordance with Work Package 2 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015. Repeat the general visual inspections thereafter at intervals not to exceed those specified in paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 737-32-

1448, Revision 1, dated May 29, 2015. If any discrepancy is found during any inspection required by this paragraph, before further flight, do all applicable related investigative and corrective actions in accordance with Work Package 2 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737 32-1448, Revision 1, dated May 29, 2015. Accomplishment of the actions required by paragraph (i) of this AD terminates the repetitive inspections required by this paragraph.

(i) Modification of MLG Trunnion Pin Assemblies

For airplanes in Groups 1 and 2, Configuration 1, and airplanes in Group 3, as identified in Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015: Except as required by paragraph (k) of this AD, at the applicable time specified in Table 1 or Table 2 of paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015, modify and lubricate the left and right MLG trunnion pin assemblies, and do all applicable related investigative and corrective actions, in accordance with Work Package 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015. Accomplishment of the actions in Work Package 3 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015, terminates the repetitive lubrication required by paragraph (g) of this AD and the repetitive inspections required by paragraph (h) of this AD.

(j) Replacement of MLG Forward Trunnion Pin Housing Assembly Seal and Retainer

For airplanes in Groups 1 and 2, Configuration 2, as identified in Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015: At the applicable time specified in Table 3, paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015, replace the

seal, retainer, and support ring assembly with a new seal and retainer configuration, install the forward trunnion pin assembly into the housing assembly, and lubricate the forward and aft trunnion pin assemblies for the left and right MLGs, in accordance with Work Package 4 of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015.

(k) Exception to Service Information Specification

Where paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 737-32-1448, Revision 1, dated May 29, 2015, specifies a compliance time “from the original issue date on this service bulletin,” this AD requires compliance within the specified compliance time “after the effective date of this AD.”

(l) Credit for Previous Actions

This paragraph provides credit for the requirements of paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 737-32-1448, dated May 19, 2011, which is not incorporated by reference in this AD.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (n) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(n) Related Information

(1) For more information about this AD, contact Alan Pohl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6450; fax: 425-917-6590; email: alan.pohl@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on December 21, 2015.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2015-32850 Filed: 12/30/2015 8:45 am; Publication Date: 12/31/2015]